

## REMARKS

Claims 1-2, 4-8, 11, and 13-22 are currently pending in this application.

### **Claim Rejections – 35 USC § 103**

Claims 1-2, 4-8, 11 and 13-22 are rejected under 35 USC § 103(a) as being unpatentable over Braun in view of Fuchs et al (Functional Imaging of Neuronal Brain Activities).

The Applicant respectfully asserts that Braun and Fuchs, either alone or in combination, do not disclose, teach, suggest, or render obvious the inventions of the pending claims. For example, claim 1 recites “displaying the confidence intervals in an overlay on a three-dimensional image” and claim 11 recites “a display in communication with the processor and adapted to display the confidence interval in three dimensions relative to a three-dimensional anatomical image, wherein the three-dimensional anatomical image is obtained through the use of the imaging source.” Braun and Fuchs, either alone or in combination, do not disclose, teach, or suggest a display adapted to display the confidence interval in three dimensions relative to a three-dimensional anatomical image. The Examiner states that Fuchs “discloses a method for functional imaging of neuronal brain activities (see title) wherein the confidence interval is overlaid on an image obtained through the use of Magnetic Resonance Imaging.”

However, Braun does not teach a confidence interval overlaid in three dimensions relative to a three-dimensional anatomical image. At most, Braun discloses a display adapted to display an overlay of a 2D neuromagnetic reconstruction on a MR image, with arrows indicating strength and direction of current density. See, Fig. 3. Confidence ellipsoids of the present invention relate to confidence margins of single dipole solutions and are unrelated to current density reconstructions described in Fuchs, with such current density reconstructions requiring known support points and result in distributed solutions.

Claims 2, 4-8, 13-16 are dependent on claims 1 and 11, and, consequently, are also not obvious over Braun in view of Fuchs. Regarding claim 14, Toshimasa does not teach an imaging source is a CT scan at page 1119, part d, as submitted in the Office action. Toshimasa discloses an magnetic resonance imaging (MRI), but not a CT scan.

As stated in the MPEP, for an invention to be obvious, “[t]he gap between the prior art and the claimed invention may not be ‘so great as to render the [claim] nonobvious to one reasonably skilled in the art.’” MPEP § 2141 (citing *Dann v. Johnston*, 425 U.S. 219, 230

(1976)). The differences between the invention of the pending claims and the combination of Braun and Fuchs, as discussed above, are so great as to render these claims nonobvious to one of ordinary skill in the art. Therefore, the pending claims are not obvious over Braun in view of Fuchs.

Claim 17 is directed to a method comprising "displaying the confidence interval on a three-dimensional anatomical map, wherein the confidence interval is displayed in its anatomical position in three dimensions." Braun and Toshimasa, either alone or in combination, do not disclose, teach, suggest, or render obvious displaying the confidence interval on a three-dimensional anatomical map, wherein the confidence interval is displayed in its anatomical position in three dimensions. As correctly acknowledged by the Examiner, Braun "does not teach wherein the confidence interval is displayed in its anatomical position." The Examiner states that Toshimasa discloses a method "wherein the confidence interval is displayed in its anatomical position (see section 1, page 118, subsection IV, part d)." (*Id.*) However, the passage of Toshimasa cited by the Examiner, although it mentions the display of a two-dimensional "head slice," does not teach the display of a confidence interval on a three-dimensional anatomical map, wherein the confidence interval is displayed in its anatomical position in three dimensions. Therefore, Braun and Toshimasa, either alone or in combination, do not disclose, teach, or suggest the invention of claim 17.

Moreover, the differences between the invention of claim 17 and the combination of Braun and Toshimasa, as discussed above, are so great as to render claim 17 nonobvious to one of ordinary skill in the art. Therefore, claim 17 is not obvious over Braun in view of Toshimasa. Claims 18-20 are dependent on claim 17, and, consequently, are also not obvious over Braun in view of Toshimasa.

Reconsideration of the rejections of the pending claims is respectfully requested.

### **Conclusion**

Applicant respectfully submits that, as amended, the subject application is in condition for allowance, and allowance thereof is kindly requested. Should the Examiner wish to discuss these claims further, or should an Examiner's Amendment be needed in order for the claims to proceed to allowance, the Examiner is invited to contact John Klos at (612) 977-8223 at the Examiner's earliest convenience.

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Respectfully submitted,

By:

  
Audrey I. Babcock

Registration No.: 57,702

John F. Klos

Registration No.: 37,162

Briggs and Morgan, P.A.

2200 IDS Center

80 South Eighth Street

Minneapolis, MN 55402

(612) 977-8400

(612) 977-8650 (Fax)

Attorneys for Applicant